

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**Draft**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Newpage Corp  
**Mailing Address:** 1724 Westvaco Road  
P.O. Box 278  
Wickliffe, KY 42087-0278

**Source Name:** Wickliffe Paper Company  
**Mailing Address:** Same as above

**Source Location:** KY Highway 51 South

**Permit Number:** V-04-008  
**Source A. I. #:** 60  
**Activity #:** APE20040005  
**Review Type:** Title V  
**Source ID #:** 21-007-00002

**Regional Office:** Paducah  
130 Eagle Nest Dr., Crittenden  
Paducah, KY 42003-9435  
(270) 898 - 8468

**County:** Ballard

**Application**  
**Complete Date:** February 12, 2000  
**Issuance Date:**  
**Revision Date:**  
**Expiration Date:**

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**John S. Lyons, Director  
Division for Air Quality**

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Permit type	Log #	Complete Date	Issuance Date	Summary of Action
Initial Issuance  V-04-008	51202	February 12, 2000		Entire Mill
				TDF Continuous Burn in the Bark Boiler ( <b>EP-09</b> )
				Lime Kiln ( <b>EP-08</b> ) Petroleum Coke Fuel Substitution
				To fire High Volume Low Concentration (HVLC) Gases in the Bark Boiler ( <b>EP-09</b> ) or Lime Kiln ( <b>EP-08</b> )
VF-04-002	56302	June 8, 2004	April 29, 2005	Burn TDF in the Bark Boiler for a Trial Test Period ( <b>EP-09</b> )
VF-01-006	54153	November 25, 2001	January 24, 2002	Recovery furnace replacement ( <b>EP-03</b> )
VF-01-002	53244	November 27, 2000	February 27, 2002	Mill changes ( <b>EP-3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 63</b> )
S-01-010	G760/ 51539	December 21, 2000	January 12, 2001	Replacement of the digester screens ( <b>EP-05</b> )
F-99-009	F922/ 50717	February 24, 1999	March 15, 1999	Debottlenecking of chip metering ( <b>EP-3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 18, 21, 26, 27</b> )
F-98-002	F302/ 50168	November 2, 1997	March 20, 1998	Pulp dryer increase ( <b>EP-40, 41</b> )

Note: This table reflects the significant permit revisions and changes for the last 10 years.

Pursuant to a duly submitted application, the Kentucky Division for Air Quality hereby

## **SECTION A – PERMIT AUTHORIZATION**

authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

- 01    #1 Power Boiler**
- 02    #2 Power Boiler**

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Description:**

Each unit is permitted to fire natural gas and generates steam for various process-related uses throughout the mill. Emissions are vented through a dedicated stack and there is no control equipment associated with each boiler.

Maximum Rated Capacity: 325 mmBtu/hr (each)

Rated Short-term Capacity: 250,000 lb steam/hr (each)

Installation Date: July 1970

### **APPLICABLE REGULATIONS:**

401 KAR 51:160, *NO<sub>x</sub> budget program requirements for large utility and industrial boilers*, applies to NO<sub>x</sub> budget units (industrial boilers).

401 KAR 51:190, *Banking and trading NO<sub>x</sub> allowances*, is applicable to NO<sub>x</sub> budget units.

401 KAR 61:015, *Existing indirect heat exchangers*, is applicable since this boiler commenced before August 17, 1971.

40 CFR Part 63, Subpart DDDDD, *NESHAP for Industrial, Commercial, and Institutional Boiler and Process Heaters (Boiler MACT)*. Although the rule is applicable, due to the combustion of natural gas, there are not any applicable emission limits or operating limits for each Power Boiler, only an initial notification requirement (Notification received on March 11, 2005).

40 CFR Part 75, *Continuous Emission Monitoring*, incorporated by reference in 40 CFR Part 96, *NO<sub>x</sub> Budget Trading Program for State Implementation Plans*.

40 CFR Part 96, *NO<sub>x</sub> Budget Trading Program for State Implementation Plans*.

### **REGULATIONS NOT APPLICABLE:**

401 KAR 60:005 incorporates the following federal regulations:

(40 CFR 60 Subpart D), *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971*, is not applicable since this boiler commenced construction, modification, or reconstruction prior to August 17, 1971.

(40 CFR 60 Subpart Db), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, is not applicable since this boiler commenced construction, modification, or reconstruction prior to June 19, 1984.

(40 CFR 60 Subpart Dc), *Standards of Performance for Small Industrial-Commercial-*

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

*Institutional steam Generating Units*, is not applicable since this boiler commenced construction, modification, or reconstruction prior to June 9, 1989.

**1. Operating Limitations:**

None

**2. Emissions Limitations:**

- a. Emissions of particulate matter (PM/PM<sub>10</sub>) shall not exceed 0.21 lb/mmBtu. [401 KAR 61:015 Section 4(1) & Appendix A]

**Compliance Demonstration Method:** The permittee shall comply with this standard by combusting natural gas. Compliance is based upon AP-42 emission factors for natural gas combustion.

- b. Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 4.0 lb/mmBtu. [401 KAR 61:015 Sections 5(1) & Appendix B]

**Compliance Demonstration Method:** The permittee shall comply with this standard by combusting natural gas. Compliance is based upon AP-42 emission factors for natural gas combustion.

- c. Opacity of visible emissions shall not exceed 20%, except for stoker fired indirect heat exchangers, a maximum of 40% opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot and, for indirect heat exchangers with stationary grates, a maximum of 40% opacity shall be permissible during cleaning of the grates for not more than three (3) consecutive minutes in any sixty (60) consecutive minutes for each section of grates that are cleaned. [401 KAR 61:015 Section 4(2)(b)]

**Compliance Demonstration Method:** The opacity limit shall be met by combusting natural gas.

- d. No later than November 30 of each year, the owner or operator shall hold NO<sub>x</sub> allowances available for compliance deductions in the unit's compliance account in an amount not less than the total NO<sub>x</sub> emissions for the control period from each unit. [401 KAR 51:160 Section 3]

**Compliance Demonstration Method:** The NO<sub>x</sub> authorized account representative of the source shall submit to the Division and the Administrator, a compliance certification report for all affected units.

For NO<sub>x</sub> Budget Emission limit: Calculate the Budget Emission Rate using the

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

methodology specified in 40 CFR Part 75.

- e. For each year that the NO<sub>x</sub> budget source elects to monitor NO<sub>x</sub> emissions from each boiler using the Low Mass Emission Unit (LMEU) methodology, the source shall submit a demonstration showing that each boiler continues to emit no more than 50 tons of NO<sub>x</sub> per ozone season. [40 CFR 75.19(b)]

**Compliance Demonstration Method:** NO<sub>x</sub> emissions for this demonstration shall be calculated as required in 40 CFR 75.19(b)(4). If any LMEU fails to provide the required demonstration, such that the calculated cumulative emissions for the unit exceed 50 tons of NO<sub>x</sub> at the end of any ozone season, then:

- i. The LMEU shall be disqualified from using the low mass emissions excepted methodology; and
- ii. The owner or operator of the LMEU shall install and certify monitoring systems that meet the requirements of 40 CFR 75.10 by December 31 of the calendar year following the ozone season in which the unit exceeded 50 tons NO<sub>x</sub>.

**3. Testing Requirements:**

Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

Item to be Monitored	Monitor	Record	Report
Fuel firing rate	continuously	daily	annually with the KYEIS
NO <sub>x</sub>	using EPA approved defaults or allowable test data	annually	annually
NO <sub>x</sub> Allowances	monthly	annually	annually per 40 CFR 96.74 and 96.10(e)

**5. Specific Recordkeeping Requirements:**

- a. Refer to Subsection 4, Specific Monitoring Requirements.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. The owner or operator of a NO<sub>x</sub> budget source shall maintain the following records:
  - i. The “Account Certificate of Authorization” for the sources NO<sub>x</sub> authorized account representative.
  - ii. Emissions monitoring information as specified in 40 CFR 96.74.
  - iii. Copies of all reports, compliance certifications, submissions, permit revision applications, LMEU qualification demonstration data, and other records to demonstrate compliance with 401 KAR 51:190.

**6. Specific Reporting Requirements:**

The NO<sub>x</sub> reports shall comply with all reporting requirements in 40 CFR 96.74 and with the requirements of 40 CFR 96.10(e).

**7. Specific Control Equipment Operating Conditions:**

None

**8. Alternate Operating Scenarios:**

None

**03 Recovery Furnace**

**Description:**



## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

The chemical recovery furnace is designed to recover and regenerate spent cooking chemicals from the wood pulping operations. The furnace also serves as the primary steam-generating unit at the mill.

Control Equipment: Wet bottom Electro-Static Precipitator (ESP) followed by a wet scrubber.

Rated Short-term Capacity: 473,000 lb steam/hr

Installation Date: July 1970

Modification Date: None

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, is applicable since this facility was used in a netting procedure for other facilities for PM and SO<sub>2</sub> emission in permit.

401 KAR 61:015, *Existing indirect heat exchangers*, is applicable since this facility commenced before August 17, 1971.

401 KAR 61:025, *Existing kraft (sulfate) pulp mills*, is applicable since this facility is associated with a kraft pulp mill and commenced before April 9, 1972.

401 KAR 63:002 (40 CFR Part 63 Subpart MM), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*, is applicable since this facility is existing chemical recovery system located at a kraft pulp mill that is a major source of hazardous air pollutants (HAP) (effective March 13, 2004).

### **REGULATIONS NOT APPLICABLE:**

401 KAR 60:005 incorporates the following federal regulations:

(40 CFR 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is not applicable since this facility commenced construction or modification before September 24, 1976.

(40 CFR 60 Subpart D), *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971*, is not applicable since this boiler commenced construction, modification, or reconstruction prior to August 17, 1971.

(40 CFR 60 Subpart Db), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, is not applicable since this boiler commenced construction, modification, or reconstruction prior to June 19, 1984.

(40 CFR 60 Subpart Dc), *Standards of Performance for Small Industrial-Commercial-Institutional steam Generating Units*, is not applicable since this boiler commenced

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

construction, modification, or reconstruction prior to June 9, 1989.

40 CFR Part 63, Subpart DDDDD, *NESHAP for Industrial, Commercial, and Institutional Boiler and Process Heaters (Boiler MACT)*, is not applicable since the recovery furnace is covered by 40 CFR 63 Subpart MM.

**1. Operating Limitations:**

Pursuant to 40 CFR 63 Subpart MM, emission rates specified under Subsection 2 and the air pollution control equipment to control these emissions, Subsection 7, represent maximum achievable control technology (MACT); hence, all equipment, including control equipment, associated with the emission unit shall be operated and monitored, see Subsection 4, to maintain emissions below the specified MACT emission rate.

**Compliance Demonstration Method:** Refer to Subsections 4 and 5 under this emission point.

**2. Emissions Limitations:**

- a. Emissions of PM/PM<sub>10</sub> shall not exceed 1.35 lbs/ton of equivalent unbleached air dried pulp produced. [401 KAR 51:017 (PSD netting from permit VF-01-002)]

**Compliance Demonstration Method:** Compliance with the PM limit of 1.35 lbs/ton of equivalent unbleached air dried pulp produced (ADTP) was demonstrated by the performance testing on December 22, 2003, which yielded an average value of 0.730 lbs/ADTP. Average emission factor derived from stack testing required in Subsection 3, Testing Requirements, shall be used to demonstrate future compliance and future emissions after the testing, along with Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

- b. Emissions of total reduced sulfur (TRS) shall not exceed an exit stack gas concentration of fifteen (15) parts per million by volume, corrected to eight (8) percent by volume oxygen, expressed as an arithmetic average over any consecutive twenty-four (24) hour period. [401 KAR 61:025 Section 4(1)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by continuously monitoring TRS emissions. Compliance shall be demonstrated by calculating the arithmetic average concentration, in ppmv @ 8% O<sub>2</sub> (by volume), over any consecutive twenty-four (24) hour period.

- c. Emissions of TRS shall not exceed an exit stack gas concentration of forty (40) parts per million by volume, corrected to eight (8) percent by volume oxygen, for more than sixty (60) total minutes in any twenty-four (24) hour period. [401 KAR 61:025 Section 4(2)]

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by continuously monitoring TRS emissions. Compliance shall be demonstrated by calculating the arithmetic average one-minute concentration, in ppmv @ 8% O<sub>2</sub> (by volume), and summing the number of one-minute periods over the standard for any consecutive twenty-four (24) hour period.

- d. Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 0.29 lbs/ton of equivalent unbleached air dried pulp produced. [401 KAR 51:017 (PSD netting from permit VF-01-002)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by the proper operation and maintenance of the scrubber in consistent with good engineering practices.

- e. i. Visible emissions shall not exceed an opacity of forty (40) percent. [401 KAR 61:025 Section 3(4)]
- ii. For an existing kraft recovery furnace equipped with an ESP, opacity measurements shall not exceed 35% for 6% or more of the operating time within any quarterly period. [40 CFR 63.864]

**Compliance Demonstration Method:** Opacity monitoring or periodically observing visible emissions from this unit may not be possible due to the moisture interference from the wet scrubber, but EPA Method 9 shall be used as the primary method for compliance with the opacity limitation. During periods when the EPA Method 9 testing cannot be performed, reasons shall be documented and submitted in the semi-annual report. Refer to Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

- f. The owner or operator of each existing kraft or soda recovery furnace must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen or comply with 40 CFR 862 (a)(1)(ii) as an alternative. [40 CFR 63.862 (a)(1)(i)]

**Compliance Demonstration Method:** Compliance with the PM limit of 0.10 g/dscm corrected to 8 percent oxygen was demonstrated by the initial 40 CFR 63, Subpart MM performance testing on September 2, 2004. Stack testing required in Subsection 3, Testing Requirements, shall be used to demonstrate future compliance after the testing, along with Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**3. Testing Requirements:**

- a. EPA Reference Method 5 or equivalent shall be performed to determine the amount of

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

PM emissions per ADTP within 6 months from issuance of the final permit.

- b. Performance test for the testing of PM (g/dscm), as detailed in 40 CFR 63.865(b) shall be performed to determine the amount of PM emissions per dry standard cubic meter, corrected to 8 percent oxygen, within 6 months from issuance of the final permit.

### 4. Specific Monitoring Requirements:

Item to be Monitored	Monitor	Record	Report
TRS Levels	continuously	daily	semi-annually
Pressure drop	once per shift	once per shift	semi-annually
Scrubber flowrate (liquid)	once per shift	once per shift	semi-annually
pH of scrubber	once per shift	once per shift	semi-annually
ESP amperage	once per shift	once per shift	semi-annually
ESP voltage	once per shift	once per shift	semi-annually
ESP heater operation	once per shift	once per shift	semi-annually
ESP rappers	once per day	daily	semi-annually
ESP air horns	once per day	daily	semi-annually
PM, SO <sub>2</sub> Control Device SSM events	continuously	daily	daily as needed
ESP, Scrubber logs	not applicable	not applicable	semi-annually
Opacity	Four opacity readings per month, none closer than 4 days apart	weekly	semi-annually

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Item to be Monitored</b>	<b>Monitor</b>	<b>Record</b>	<b>Report</b>
Operation	hours per month and months per year	hours per month and months per year	semi-annually
Production	unbleached air dried pulp	unbleached air dried pulp	semi-annually

Applicable monitoring requirements specified in 40 CFR 63.864 shall apply.

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of the items monitored in Subsection 4, above.
- b. The permittee shall maintain plans and processing rates as specified in 40 CFR 63.866.
- c. The permittee shall record each incident when PM or SO<sub>2</sub> emissions were not properly controlled by the scrubber, or PM emissions were not properly controlled by the ESP. This record shall include the date, time, duration, cause, and any corrective action taken.
- d. The permittee shall maintain records of the amount of materials processed.
- e. A log shall be kept for all visible emission observations. Notification in the daily log shall be made of but not limited to the following:
  - i. Whether any air emissions (except for water vapor) were visible from the boiler.
  - ii. Whether the visible emissions were normal for the boiler.
  - iii. The cause of any abnormal emissions or water vapor interference and any corrective action taken.
- f. Maintain a Startup/Shutdown/Malfunction Plan and other records, as specified in 40 CFR Part 63, Subpart MM and Subpart A.

**6. Specific Reporting Requirements:**

Applicable reporting requirements specified in 40 CFR 63.867 shall apply.

**7. Specific Control Equipment Operating Conditions:**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. The permittee shall properly operate and maintain the ESP and wet scrubber. Please refer to Section E.
- b. Control equipment operational ranges shall be established during initial and subsequent compliance testing programs. [40 CFR 63.864(j)]

**8. Alternate Operating Scenarios:**

None

**04 Smelt Dissolving Tank**

**Description:**

The smelt-dissolving tank acts as a quench and dilution tank for molten smelt from the recovery furnace. This process forms green liquor, which is sent to the causticizing process for conversion back to white liquor.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Control Equipment: Wet scrubber  
Rated Short-term Capacity: 72,900 lb/hr smelt  
Installation Date: July 1970

**APPLICABLE REGULATIONS:**

401 KAR 61:025, *Existing kraft (sulfate) pulp mills*, is applicable since this facility is associated with a kraft pulp mill and commenced before April 9, 1972.

401 KAR 63:002 (40 CFR Part 63 Subpart MM), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*, is applicable since this facility is smelt dissolving tank(s) located at a kraft pulp mill that is a major source of hazardous air pollutants (HAP) (effective March 13, 2004).

**REGULATIONS NOT APPLICABLE:**

401 KAR 60:005 (40 CFR 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is not applicable since this facility commenced construction before September 24, 1976.

401 KAR 59:080, *New kraft (sulfate) pulp mills*, is not applicable since this facility did not commence on or after April 9, 1972 and before September 24, 1976.

1. **Operating Limitations:** None

2. **Emissions Limitations:**

- a. Visible emissions shall not exceed an opacity of forty (40) percent. [401 KAR 61:025 Section 3(4)]

**Compliance Demonstration Method:** Opacity monitoring or periodically observing visible emissions from this unit may not be possible due to the moisture interference from the wet scrubber, but EPA Method 9 shall be used as the primary method for compliance with the opacity limitation. During periods when the EPA Method 9 testing cannot be performed, reasons shall be documented and submitted in the semi-annual report.

- b. Emissions of particulate matter (PM) shall not exceed 0.5 lbs/ton of equivalent unbleached air-dried pulp produced. [401 KAR 61:025 Section 3(3)]

**Compliance Demonstration Method:** Compliance with the PM limit of 0.5 lbs/ton of equivalent unbleached air-dried pulp produced was demonstrated by the initial 40 CFR 63, Subpart MM performance testing on September 2, 2004. Stack testing required in Subsection 3, Testing Requirements, shall be used to demonstrate future compliance after the testing, along with Subsection 4, Specific Monitoring Requirements, and Subsection

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5, Specific Recordkeeping Requirements.**

- c. The owner or operator of each existing kraft or soda smelt dissolving tank must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired or comply with 40 CFR 862 (a)(1)(ii) as an alternative. [40 CFR 63.862 (a)(1)(i)]

**Compliance Demonstration Method:** Compliance with the PM limit of 0.10 kg/Mg was demonstrated by the initial 40 CFR 63, Subpart MM performance testing on September 2, 2004. Stack testing required in Subsection 3, Testing Requirements, shall be used to demonstrate future compliance after the testing, along with Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**3. Testing Requirements:**

- a. EPA Reference Method 5 or equivalent shall be performed to determine the amount of PM emissions per ton of equivalent unbleached air-dried pulp produced, within 6 months from issuance of the final permit.
- b. Performance test for the testing of PM (kg/Mg of black liquor solids fired), as detailed in 40 CFR 63.865(b) shall be performed to determine the amount of PM emissions per megagram, within 6 months from issuance of the final permit.

**4. Specific Monitoring Requirements:**

Item to be Monitored	Monitor	Record	Report
Scrubber liquid flowrate	continuously	15-minutes	semi-annually
Opacity	Four opacity readings per month, none closer than 4 days apart	weekly	semi-annually

- a. The applicable monitoring requirements specified in 40 CFR 63.864 shall apply.
- b. The permittee shall install, calibrate, maintain, and operate a continuous parameter monitoring system (CPMS) that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c), as well as the procedures in 40 CFR 63.864(e)(10)(i) and (ii).



## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. The permittee shall monitor and maintain records of the malfunction or down time on the wet scrubber.
- d. The permittee shall monitor and maintain records of date, time/duration, cause and corrective action of moisture interference.

### **5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of the items monitored in Subsection 4, above.
- b. The permittee shall maintain plans and processing rates as specified in 40 CFR 63.866.
- c. A log shall be kept for all visible emission observations. Notification in the daily log shall be made of but not limited to the following:
  - i. Whether any air emissions (except for water vapor) were visible from the unit.
  - ii. Whether the visible emissions were normal for the unit.
  - iii. The cause of any abnormal emissions or water vapor interference and any corrective action taken.
- d. Maintain a Startup/Shutdown/Malfunction Plan and other records, as specified in 40 CFR Part 63, Subpart MM and Subpart A.

### **6. Specific Reporting Requirements:**

Applicable reporting requirements specified in 40 CFR 63.867 shall apply.

### **7. Specific Control Equipment Operating Conditions:**

Control equipment operational ranges shall be established during initial and subsequent compliance testing programs. [40 CFR 63.864(j)]

### **8. Alternate Operating Scenarios: None**

### **05 Digester System:**

#### **Description:**

The digester system is a series of components complementing the continuous digester that uses steam, pressure, and chemicals to digest the raw wood chip feed and produce pulp. Vent gases from the digester relief and blow tank are vented to the mill's Non-Condensable Gas (NCG) system. This Digester is part of the low volume high concentration (LVHC) system.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Control Equipment: Bark Boiler (EP-09) or the Lime Kiln (EP-08)  
Rated Short-term Capacity: 50 tons/hr (unbleached oven-dried)  
Installation Date: July 1970  
Modification Date: 2002

### **APPLICABLE REGULATIONS:**

401 KAR 51:017 (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*, effective January 6, 1975.

401 KAR 61:025, *Existing kraft (sulfate) pulp mills*, is applicable since this facility is associated with a kraft pulp mill and commenced before April 9, 1972.

401 KAR 60:005 (40 CFR Part 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is applicable since this facility was modified after September 24, 1976.

401 KAR 63:002 (40 CFR Part 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the kraft processes using wood. [Refer to Units No. 57 LVHC System and No. 56 HVLC System for Applicable Subpart S Requirements]

### **REGULATIONS NOT APPLICABLE:**

401 KAR 59:080, *New kraft (sulfate) pulp mills*, is not applicable since this facility did not commence on or after April 9, 1972 and before September 24, 1976.

### **1. Operating Limitations:**

- a. i. Gases shall be combusted in an incinerator or combusted in a lime kiln or other device at a minimum temperature of 1200 °F for at least 0.5 second (s). [40 CFR 60.283(a)(1)(iii)]
- ii. Total HAP emissions shall be reduced by introducing the HAP emission stream with the primary fuel or into the flame zone in a boiler, or lime kiln. [40 CFR 63.443(d)(4)(i)]

**Compliance Demonstration Method:** The permittee shall assure compliance with 40 CFR 60 Subpart BB based on the monitoring and reporting requirements outlined for this emission unit and the primary and secondary treatment systems (i.e., the Bark/Combination Boiler and Lime Kiln, respectively).

- b. Pulp production shall not exceed 401,500 air-dried tons per rolling 12-month period. [401 KAR 51:017 (40 CFR 52.21)]

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Compliance Demonstration Method:** Monthly pulp production records shall be maintained and totaled for each rolling 12-month period.

- c. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.

**2. Emission Limitations:**

Uncontrolled TRS gases shall contain less than 0.01 lbs/ADPT (tons of air dried pulp). [40 CFR 60.283(a)(1)(vi)]

**3. Testing Requirements:**

Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.

**4. Specific Monitoring Requirements:**

Item to be Monitored	Monitor	Record	Report
Pulp Production	daily	monthly	semi-annually

Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.

**5. Specific Recordkeeping Requirements:**

- a. Records shall be kept of the testing requirements and results.
- b. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.
- c. Refer to the recordkeeping requirements for the condensate collection and treatment system. (EP-63).
- d. The permittee shall maintain a log indicating the switching date from one control device Bark Boiler (EP-09) or the Lime Kiln (EP-08) to another. Identify the control device, switch date, and duration of time to specific control device.

**6. Specific Reporting Requirements:**

- a. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. Refer to the reporting requirements for the condensate collection and treatment system identified in EP-63.

### **7. Specific Control Equipment Operating Conditions:**

Refer to the Bark Boiler (EP-09) or the Lime Kiln (EP-08).

### **8. Alternate Operating Scenarios:**

None

## **06 Multiple Effect Evaporator System**

### **Description:**

The evaporator system uses steam to evaporate water from the spent pulping liquor generated by the digester system. Vent gases from the multiple effect evaporators are vented to the mill's NCG system.

Control Equipment: Low Volume High Concentration (LVHC) system (EP-57) convey gases to the Bark Boiler (EP-09) or the Lime Kiln (EP-08)

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Rated Short-term Capacity: 120,000 gal/hr (weak black liquor)

Installation Date: July 1970

Modification Date: 2002

### **APPLICABLE REGULATIONS:**

401 KAR 51:017 (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*, effective January 6, 1975.

401 KAR 61:025, *Existing kraft (sulfate) pulp mills*, is applicable since this facility is associated with a kraft pulp mill and commenced before April 9, 1972.

401 KAR 60:005 (40 CFR Part 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is applicable since this facility was modified after September 24, 1976.

401 KAR 63:002 (40 CFR Part 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the kraft processes using wood. [Refer to Units No. 57 LVHC System and No. 56 HVLC System for Applicable Subpart S Requirements]

### **REGULATIONS NOT APPLICABLE:**

401 KAR 59:080, *New kraft (sulfate) pulp mills*, is not applicable since this facility did not commence on or after April 9, 1972 and before September 24, 1976.

#### **1. Operating Limitations:**

- a. Gases shall be combusted in an incinerator or combusted in a lime kiln or other device at a minimum temperature of 1200 °F for at least 0.5 second (s). [40 CFR 60.283(a)(1)(iii)]

**Compliance Demonstration Method:** The permittee shall assure compliance with 40 CFR 60 Subpart BB based on the monitoring and reporting requirements outlined for this emission unit and the primary and secondary treatment systems (i.e., the Bark/Combination Boiler and Lime Kiln, respectively).

- b. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.

#### **2. Emission Limitations:**

Uncontrolled TRS gases shall contain less than 0.01 lbs/ADPT (tons of air dried pulp). [40 CFR 60.283(a)(1)(vi)]

#### **3. Testing Requirements:**

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.

### **4. Specific Monitoring Requirements:**

- a. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.
- b. Refer to the monitoring requirements for the for the condensate collection and treatment system. (EP-63).

### **5. Specific Recordkeeping Requirements:**

- a. Records shall be kept of the testing requirements and results.
- b. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.
- c. Refer to the recordkeeping requirements for the condensate collection and treatment system. (EP-63).
- d. The permittee shall maintain a log indicating the switching date from one control device Bark Boiler (EP-09) or the Lime Kiln (EP-08) to another. Identify the control device, switch date, and duration of time to specific control device.

### **6. Specific Reporting Requirements:**

- a. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.
- b. Refer to the reporting requirements for the condensate collection and treatment system identified in EP-63.

### **7. Specific Control Equipment Operating Conditions:**

Refer to the Bark Boiler (EP-09) or the Lime Kiln (EP-08).

### **8. Alternate Operating Scenarios:**

None

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **07 BLOX Towers**

#### **Description:**

Black liquor oxidation (BLOX) towers serve to decrease the concentration of reduced sulfur compounds in the black liquor entering the recovery furnace. The oxidation process converts sulfides to thiosulfates and thereby prevents hot recovery flue gases from “stripping” TRS compounds from the black liquor during the contact process. The BLOX process also tends to lower the fuel value of the black liquor. Oxidation is currently accomplished by contacting the black liquor with air. Increasing the capacity or efficiency of the BLOX towers will allow the Mill to burn more black liquor by lowering the solids content of the black liquor and thereby reducing its heating value. The Mill is considering either adding another oxidation tower to increase the system capacity or modifying the existing towers to utilize molecular oxygen as the

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

oxidation agent to increase the oxidation efficiency and thereby increase throughput.

Note: BLOX Towers potential emissions are more than 90 ton/yr volatile organic compounds (VOC), 22.5 ton/yr total HAP, and 9 ton/yr individual HAP. There is no particulate matter emission.

Control Equipment: None

Rated Short-term Capacity: 1,000 gal. Black Liquor/min

Installation Date: July 1970

### **APPLICABLE REGULATIONS:**

401 KAR 63:020, *Potentially hazardous matter or toxic substances*, is applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality.

1. **Operating Limitations:** Refer to Section D.
2. **Emission Limitations:** None
3. **Testing Requirements:** None
4. **Specific Monitoring Requirements:** None
5. **Specific Recordkeeping Requirements:** None
6. **Specific Reporting Requirements:** None
7. **Specific Control Equipment Operating Conditions:** None
8. **Alternate Operating Scenarios:** None



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****08 Lime Kiln****Description:**

The Lime Kiln is used to calcine lime mud to regenerate quicklime that is used in the production of white liquor. The kiln is also used as an incineration point for the Non-Condensable Gases (NCGs) vent streams in the mill.

Control Equipment:	Wet scrubber
Rated Short-term Capacity:	350 tons per day (TPD) Lime
Installation Date:	July 1970
Modification Date:	1996 (Incinerating of gases from EP-05 and 06)
Proposed Modification:	2006 – Use of Pet Coke
Fuel (Proposed 2006):	75% Pet Coke, 25% Natural Gas

**APPLICABLE REGULATIONS:**

401 KAR 61:025, *Existing Kraft (sulfate) pulp mills*, is applicable since this lime kiln commenced before April 9, 1972.

401 KAR 60:005 (40 CFR 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is applicable since the gases from modified Digester System (EP-05) and Multiple Effect Evaporator System (EP-06) are transported and incinerated in the Lime Kiln (EP-08).

401 KAR 63:002 (40 CFR 63 Subpart MM), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*, applies to each lime kiln located at a kraft pulp mill. (effective March 13, 2004)

401 KAR 63:002 (40 CFR Part 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the kraft pulping processes using wood. [Refer to Unit No. 56, *HVLC System* and 57, *LVHC system* for Applicable Subpart S Requirements]

**REGULATIONS NOT APPLICABLE:**

401 KAR 60:005 (40 CFR 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is not applicable for PM and TRS since the kiln was constructed before the effective date and has not been modified and is therefore not subject to the emission limitations for that source category. It is subject to the requirements as an incinerator (1200 deg F for 0.5 seconds) when used as an incinerator for NCG gasses.

401 KAR 51:017 (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*, is not applicable since the conservative emissions increases calculated for the proposed change due

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

to pet coke / natural gas firing in the lime kiln will not result in a significant emissions increase for any PSD-regulated pollutants.

401 KAR 59:015, *New indirect heat exchangers*, is not applicable since the lime kiln is a direct heat exchanger.

401 KAR 59:080, *New kraft (sulfate) pulp mills*, is not applicable since this facility did not commence on or after April 9, 1972 and before September 24, 1976.

**1. Operating Limitations:**

- a. The lime kiln shall be operated in excess of 1200 degrees Fahrenheit with a residence time of at least 0.5 second to achieve a 98% destruction efficiency when being used as a control device to meet the requirements of 40 CFR 60 Subpart BB. The NCGs shall be introduced with the primary fuel or directly into the flame zone. [40 CFR 60.283(a)(1)(i) and (a)(1)(iii)] [40 CFR 63.443(d)(4)(i)] [401 KAR 61:025 Section 4(3)]

**Compliance Demonstration Method:** Compliance shall be based on achieving an arithmetic average combustion temperature of 1200 degrees Fahrenheit or more over any five (5) minute period when the kiln is being used as a control device. The permittee shall demonstrate compliance by monitoring the lime kiln combustion temperature. The kiln shall be interlocked to switch NCGs to the bark boiler should the temperature fall below 1200 degrees F. The permittee shall also maintain records demonstrating that the residence time is equal to or greater than 0.5 second (s).

- b. Refer to the HVLC System listed under Unit 56 and the LVHC System listed under Unit 57.

**2. Emissions Limitations:**

- a. Visible emissions shall not exceed an opacity of forty (40) percent. [401 KAR 61:025 Section 3(4)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by conducting Method 9 observations. Refer to Subsection 4, Specific Monitoring Requirements, and Subsection 6, Specific Reporting Requirements.

- b. Emissions of particulate matter (PM) shall not exceed 1.0 lbs/ton of equivalent unbleached air-dried pulp produced. [401 KAR 61:025 Section 3(2)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by the proper operation and maintenance of the scrubber.

- c. The owner or operator of each existing kraft or soda lime kiln must ensure that the

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen or comply with 40 CFR 862 (a)(1)(ii) as an alternative. [40 CFR 63.862 (a)(1)(i)]

**Compliance Demonstration Method:** Compliance with the PM limit of 0.15 g/dscm corrected to 10 percent oxygen was demonstrated by the initial 40 CFR 63, Subpart MM performance testing on September 2, 2004. Stack testing required in Subsection 3, Testing Requirements, shall be used to demonstrate future compliance after the testing, along with Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**3. Testing Requirements:**

Testing of PM (g/dscm), as detailed in 40 CFR 63.865(b) shall be performed to determine the amount of PM emissions per dry standard cubic meter, corrected to 10 percent oxygen, within 6 months from issuance of the final permit.

**4. Specific Monitoring Requirements:**

Item to be Monitored	Monitor	Record	Report
Kiln combustion temp.	continuously when used as a control device	5-minutes	semi-annually
Scrubber pressure drop	15 min	15 min	semi-annually
Scrubber flow rate	15 min	15 min	semi-annually
Visible Emissions Method 9	once per month	monthly	semi-annually
Residence Time	not applicable	by design	semi-annually
Fuels	natural gas, pet coke, and product lime	daily	semi-annually

The owner or operator of a kraft lime kiln equipped with a wet scrubber must install, calibrate, maintain, and operate a continuous parameter monitoring system (CPMS) that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c), as well as the procedures in 40 CFR 63.864 (e)(10)(i) and (ii).

**5. Specific Recordkeeping Requirements:**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. The permittee shall maintain plans and monitor processing rates as specified in 40 CFR 63.866.
- b. Maintain a Startup/Shutdown/Malfunction Plan and other records, as specified in 40 CFR Part 63, Subpart MM and Subpart A.
- c. See Table under Subsection 4.

**6. Specific Reporting Requirements:**

- a. The applicable reporting requirements specified in 40 CFR 63.867 shall apply.
- b. See Table under Subsection 4.

**7. Specific Control Equipment Operating Conditions:**

- a. The permittee shall apply the provisions of Section E, Source Control Equipment Requirements, to the operation of the scrubber.
- b. Control equipment operational ranges shall be established during initial and subsequent compliance testing programs. [40 CFR 63.864(j)]
- c. It is a violation of 40 CFR 63 of Subpart MM if six or more of the 3-hour average parameter values within any 6-month reporting period are outside the range of values established. [40 CFR 63.864(k)(2)]
- d. Refer to Subsection 4.

**8. Alternate Operating Scenarios:**

None

**9. Compliance Schedule:**

None

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****09 Bark/Combination Boiler****Description:**

The bark boiler is a multi-fuel boiler that supplies a significant portion of the mill's steam supply. Fuels fired include: bark/wood waste, paper and fiber waste generated on site, waste treatment sludge, waste oil, tire derived fuel (TDF), and natural gas. The bark boiler is also used as an incineration point for the non-condensable gas (NCG) vent streams in the mill.

Note under Applicable Regulations that Boiler MACT is not applicable until September 13, 2007.

Control Equipment:	A dry electro-static precipitator (ESP)
Rated Short-term Capacity:	450,000 lb steam/hr
Installation Date:	1979
Modification Date:	1996 (Incinerating of gases from EP-05 and 06)
Maximum Waste Oil Combustion Rate:	200 gallon/hr

**APPLICABLE REGULATIONS:**

401 KAR 51:017 (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*, is applicable since the construction permit (C-77-123, which was rolled into C-89-148) for a bark boiler (PSD) included air quality modeling that showed no degradation of the ambient air quality at various operating and emission rates. PSD is not applicable for the continuous TDF burn because there was no significant emission increase for any PSD-regulated pollutants.

401 KAR 59:015, *New indirect heat exchangers*, is applicable since this facility commenced after August 17, 1971.

401 KAR 60:005 (40 CFR 60 Subpart D), *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971*, is applicable since this facility commenced after August 17, 1971 and that has a maximum design heat input capacity greater than 250 mmBtu/hr.

401 KAR 60:005 (40 CFR 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is applicable since the gases from modified Digester System (EP-05) and Multiple Effect Evaporator System (EP-06) are transported and incinerated in the Bark/Combination Boiler (EP-09).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

401 KAR 57:002 (40 CFR 61 Subpart E), *National Emission Standard for Mercury*, is applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.

401 KAR 63:002 (40 CFR 63 Subpart DDDDD), *NESHAP for Industrial, Commercial, and Institutional Boiler and Process heaters (Boiler MACT)* is applicable since this facility is a major source as defined in 40 CFR 63.7575. (Anticipated Compliance Date: September 13, 2007)

401 KAR 63:002 (40 CFR 63 Subpart S), *NESHAP from the Pulp and Paper Industry*, is applicable since this facility produces paper that uses a kraft pulping processes using wood.

**REGULATIONS NOT APPLICABLE:**

401 KAR 60:005 (40 CFR 60 Subparts Db), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, is not applicable since this facility commenced before June 19, 1984.

401 KAR 60:005 (40 CFR 60 Subparts Dc), *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, is not applicable since this facility commenced before June 9, 1989 and has a maximum design heat input capacity greater than 100 mmBtu/hr.

401 KAR 51:160, *NO<sub>x</sub> requirement for large utility and industrial boilers*, is not applicable since this unit is not fossil fuel fired as defined at 401 KAR 51:001 for greater than 50% of the units total heat input during 1995.

The Acid Rain Provisions (40 CFR Parts 72-78) is not applicable since this facility is not limited in Table 1 of 40 CFR 73.10(a).

401 KAR 59:015, *Section 7, Emission and Fuel Monitoring*, and 40 CFR 60.45, *Emission and Fuel Monitoring*, are not applicable for a continuous monitoring system for measuring nitrogen oxides and sulfur dioxide (SO<sub>2</sub>) since emissions of nitrogen oxides (NO<sub>x</sub>) are less than seventy (70) percent of the applicable standards and the indirect heat exchanger does not use a flue gas desulfurization device.

40 CFR 61:55, *Monitoring of emissions and operations*, is not applicable since the source does not have mercury emissions which exceed 1.6 kg (3.5 lb) per 24-hour period.

**1. Operating Limitations:**

- a. The rate of firing of the waste oil shall not exceed 1,500 gallons per month. [PSD Limitation from permit C-89-148]

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by maintaining monthly fuel throughput records.

- b. The rate of firing the waste oil shall not exceed 200 gallons per hour. [PSD Limitation from permit C-89-148]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by maintaining hourly records of the quantity of waste oil fired in the boiler.

- c. The Bark Boiler shall be operated in excess of 1200 degrees Fahrenheit with a residence time of at least 0.5 second to achieve a 98% destruction efficiency when being used as a control device to meet the requirements of 40 CFR 60 Subpart BB. The NCGs shall be introduced with the primary fuel or directly into the flame zone. [40 CFR 60.283(a)(1)(i) and (a)(1)(iii)] [40 CFR 63.443(d)(4)(i)] [401 KAR 61:025 Section 4(3)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by monitoring to ensure that the boiler firebox temperature is greater than 1200 degrees Fahrenheit or that the bark boiler steam load is maintained at or in excess of 90,000 lbs/hr to maintain a temperature of 1200 degrees Fahrenheit or more. Compliance is assumed if the arithmetic average steam load is 90,000 lb/hr over a fifteen-minute averaging period. Permittee maintains records demonstrating that the residence time is equal to or greater than 0.5 second. Either option applies only when being used as a control device.

- d. No changes in the operation of a plant shall be made after a sludge test has been conducted which would potentially increase mercury emissions above the level determined by the most recent sludge test, until the new emission level has been estimated by calculation and the results reported to the Division. [40 CFR 61.54(e)]

**Compliance Demonstration Method:** The Division shall be notified and applicable testing shall be conducted should any changes in the operation of the plant that could increase mercury emissions be considered.

- e. Maximum hourly heat input shall not exceed:
  - 463 mmBtu/hr when firing 55% moisture content wood residue
  - 634 mmBtu/hr when firing 30% moisture content wood residue
  - 631 mmBtu/hr when firing any optimum mixture of wood residue and natural gas and other fuels listed.[PSD Limitation from permit C-89-148]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by monitoring daily fuel firing rates for each fuel fired and determining fuel heat content analysis at least four (4) times per month for bark. The data shall be summarized and

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

compliance determined on a rolling 30-day average basis.

- f. Coal or fuel oil shall not be used as fuel. [PSD Limitation from permit C-89-148]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by monitoring fuel firing rates for each fuel fired.

- g. Waste treatment sludge may be burned in the bark boiler up to 15% of the total heat input to the bark boiler on a monthly average. [State-Origin Operating Limitation from letter 6-17-98]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by monitoring fuel firing rates and maintaining fuel heat content analysis for each fuel fired.

### **2. Emissions Limitations:**

- a. Emissions of particulate matter (PM) shall not exceed 0.1 lb/mmBtu heat input. [401 KAR 59:015 Section 4(1)(b) and 40 CFR 60.42(a)(1)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard through emission testing and by the proper operation and maintenance of the ESP in accordance with manufacturer's recommended operating practices.

- b. Emissions of particulate matter (PM) shall not exceed 0.07 lb/mmBtu heat input, or as an alternative option shall not exceed 0.001 lb/mmBtu of total selected metals (TSM). [40 CFR 63.7500(a)(1)]

**Compliance Demonstration Method:** The permittee shall demonstrate initial compliance with this standard through any of the following methods as specified in the rule [40 CFR Part 63, Subpart DDDDD]: fuel analysis, performance testing (i.e., stack testing), or the health-based compliance alternative. [40 CFR 63, Subpart DDDDD, Appendix A] Subsequent fuel analyses or performance tests must be performed at the frequency specified by the rule.

- c. Emissions of hydrogen chloride (HCl) shall not exceed 0.09 lb/mmBtu heat input. [40 CFR 63.7500(a)(1)]

**Compliance Demonstration Method:** The permittee shall demonstrate initial compliance with this standard through any of the following methods as specified in the rule [40 CFR Part 63, Subpart DDDDD]: fuel analysis, performance testing (i.e., stack testing), or the health-based compliance alternative. [40 CFR 63, Subpart DDDDD, Appendix A] Subsequent fuel analyses or performance tests must be performed at the frequency specified by the rule.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- d. Emissions of Mercury (Hg) shall not exceed 0.000009 lb/mmBtu heat input. [40 CFR 63.7500(a)(1)]

**Compliance Demonstration Method:** The permittee shall demonstrate initial compliance with this standard through either fuel analysis or performance testing (i.e. stack testing) as specified in the rule [40 CFR Part 63, Subpart DDDDD]. Subsequent fuel analyses or performance tests must be performed at the frequency specified by the rule.

- e. Emission of sulfur dioxide (SO<sub>2</sub>) shall not exceed 0.8 lb/mmBtu heat input. [401 KAR 59:015 Section 5(1)(b) and 40 CFR 60.43(a)(1)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard through emission testing. Compliance shall be based on the total heat input from the fuels burned, including gaseous fuels.

- f. Opacity of visible emission shall not exceed twenty (20) percent except that a maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes. [401 KAR 59:015 Section 4(2), 40 CFR 60.42(a)(2), and 40 CFR 63.7500(a)(2)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by continuously monitoring opacity.

- g. Emissions to the atmosphere from sludge incineration plants, sludge drying plants, or a combination of these that process wastewater treatment plant sludge shall not exceed 3200 grams (7.1 lb) of mercury per 24-hour period [40 CFR 61.52(b)].

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with 40 CFR 61.52 through sludge sampling test pursuant to the requirements outlined in 40 CFR 61.54. Sludge sampling and analysis shall be performed, recorded, sampled, and calculated in accordance with 40 CFR 61.54.

- h. Emission of nitrogen oxides (NO<sub>x</sub>) shall not exceed 0.40 lb/mmBtu heat input. [401 KAR59:015 Section 6(2) and 40 CFR 60.44(b)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard through emission testing, as required by the Division.

**3. Testing Requirements:**

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- a. Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.
- b. The permittee shall conduct an initial compliance demonstration by the date specified in the rule for applicable Boiler MACT emission limits for TSM or PM, HCl, and mercury through fuel analysis or performance testing (i.e., stack testing) or the health-based compliance alternative (applies only to TSM and HCl) using the procedures and methodology specified in the rule. [40 CFR Part 63, Subpart DDDDD] Subsequent fuel analyses or performance tests must be performed at the frequency specified by the rule.

### 4. Specific Monitoring Requirements:

- a. The permittee shall monitor/maintain a log of the mercury standards/analysis and limits established under Subsection 2.g.
- b. Refer to table below.

Item to be Monitored	Monitor	Record	Report
Bark sample for moisture and Btu content	4 per month	monthly	semi-annually
Combustion temperature/steam load	continuously	continuously	semi-annually
Amount of natural gas combusted	daily	daily	semi-annually
Amount of wood waste combusted	daily	daily	semi-annually
Amount of wastewater sludge combusted	daily	daily	semi-annually
Amount of waste oil combusted	hourly, as fired	hourly	semi-annually
Opacity	continuously	6-min	semi-annually
Residence time	not applicable	by design	semi-annually
Boiler heat input	daily	rolling 30 days average	semi-annually
Amount of TDF combusted	daily	daily	semi-annually

### 5. Specific Recordkeeping Requirements:

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. See Table under Subsection 4.
- b. The permittee shall maintain records of temperature or steam flow rate for the bark boiler and shall perform the necessary calculations to verify the residence time is equal to or greater than 0.5 second and that 90,000 lb steam per hour is adequate to maintain 1200 °F. It steam flow is used to demonstrate compliance.
- c. If compliance with an applicable Boiler MACT emission limit is demonstrated through fuel analysis, the permittee shall maintain a copy of calculations and supporting information of TSM, HCl, or mercury emission rates as specified in the rule. [40 CFR Part 63, Subpart DDDDD]
- d. If compliance with an applicable Boiler MACT emission limit is demonstrated through performance testing (i.e., stack testing), the permittee shall maintain a copy of calculations and supporting information of maximum fuel PM/TSM, HCl, or mercury input levels as specified in the rule. [40 CFR Part 63, Subpart DDDDD]
- e. The permittee shall maintain a copy of each notification and report that was submitted pursuant to the Boiler MACT rule [40 CFR Part 63, Subpart DDDDD], including all documentation supporting the initial notification, notification of compliance status, and semiannual compliance reports.
- f. The permittee shall maintain records related to startups, shutdowns, and malfunctions as specified in the MACT General Provisions. [40 CFR Part 63, Subpart A]
- g. The permittee shall maintain records of performance tests, fuel analyses, or other compliance demonstrations as well as opacity monitor performance evaluations performed pursuant to the Boiler MACT rule. [40 CFR Part 63, Subpart DDDDD]

### **6. Specific Reporting Requirements:**

- a. See Table under Subsection 4.
- b. Notification requirements specified in the Boiler MACT rule shall apply. [40 CFR Part 63, Subpart DDDDD]
- c. The permittee shall submit semiannual compliance reports, as specified in the Boiler MACT rule. [40 CFR Part 63, Subpart DDDDD]

### **7. Specific Control Equipment Operating Conditions:**

- a. The bark boiler must be at a minimum of 90,000 lb/hr steam flow prior to accepting NCG system vent gases to ensure acceptable destruction efficiency.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. The permittee shall apply the provisions of Section E, Source Control Equipment Requirements, to the operation of the ESP.

**8. Alternate Operating Scenarios:**

None

**9. Compliance Schedule:**

None

**11 Brown Stock Washing System**

**Description:**

The brown stock washers (BSW) are used to wash the pulp prior to the bleaching process.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Equipment	Controls
Knot System	Uncontrolled
Decker	
Primary and Secondary Screen Reject Tanks	
No1. Brownstock Washer	Primary – Bark Boiler Alternate Secondary – Lime Kiln
No2. Brownstock Washer	
No1. Filtrate Tank	
No 2. Filtrate Tank	
Decker Filtrate Tank	
Pre-Bleach Filtrate Tank	

Note: Gases from the No. 1 and No. 2 Brownstock Washer hoods and associated filtrate tanks are collected into the HVLC System (see EP-56) and incinerated in the bark boiler (EP-09) or the lime kiln (EP-08).

Rated Short-term Capacity: 50 Oven-Dried Tons (ODT)/hr

Installation Date: July 1970

### **APPLICABLE REGULATIONS:**

401 KAR 63:002 (40 CFR 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the kraft pulping processes using wood. (effective April 17, 2006).

### **REGULATIONS NOT APPLICABLE:**

401 KAR 60:005 (40 CFR 60 Subpart BB), *Standards of Performance for Kraft Pulp Mills*, is not applicable since this facility commenced construction or modification before September 24, 1976.

401 KAR 59:080, *New kraft (sulfate) pulp mills*, is not applicable since this facility did not commence on or after April 9, 1972 and before September 24, 1976.

### **1. Operating Limitations:**

Emissions from the Brown Stock washer hoods and filtrate tanks shall be enclosed and vented into a closed-vent system and routed to the Bark Boiler (EP-09) or the Lime Kiln (EP-08). [40 CFR 63.443(c), 40 CFR 63.443(d)(4)(i), and State-Origin Condition based on

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Agreed Order DAQ-92025-05]

**Compliance Demonstration Method:** The permittee shall vent all gasses from the filtrate tanks and brown stock washer to the NCG System (i.e., Lime Kiln or Bark/Combination Boiler).

### **2. Emissions Limitations:**

None

### **3. Testing Requirements:**

Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.

### **4. Specific Monitoring Requirements:**

None

### **5. Specific Recordkeeping Requirements:**

None

### **6. Specific Reporting Requirements:**

None

### **7. Specific Control Equipment Operating Conditions:**

Emissions from the filtrate tanks and brown stock washers shall be controlled in the Lime Kiln or Bark Boiler. Refer to Emission Point Numbers 08 (Lime Kiln) and 09 (Bark/Combination Boiler) in this operating permit for specific control equipment operating conditions.

### **8. Alternate Operating Scenarios:**

None

## **14 Starch Silo – Machine (Size Press)**

### **Description:**

The starch storage silo is used to store starch that is pneumatically unloaded from railcars or trucks prior to use at the paper machine (EP-64).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Control Equipment: Baghouse  
Rated Short-term Capacity: 15 tons/hr  
Installation Date: July 1970

**APPLICABLE REGULATIONS:**

401 KAR 61:020, *Existing process operations*, is applicable since this facility commenced before July 2, 1975.

**REGULATIONS NOT APPLICABLE:**

401 KAR 59:010, *New process operations*, is not applicable since this facility did not commence on or after April 9, 1972.

**1. Operating Limitations:**

None

**2. Emissions Limitations:**

- a. Pursuant to 401 KAR 61:020, Appendix A, the emissions of particulate matter shall not exceed the allowable rate limit as calculated by the following equations using the process weight rate (in units of tons/hr).

For process rates up to 1,000 lbs/hr:  $E = 2.58$

For process rates up to 60,000 lbs/hr:  $E = 4.10P^{0.67}$

For process rates in excess of 60,000 lbs/hr:  $E = 55.0P^{0.11} - 40$

For the equations:  $E$  = rate of emission in lb/hr and  $P$  = process weight rate in tons/hr (monthly throughput in tons/monthly hours of operation).

**Compliance Demonstration Method:** The permittee shall comply with this standard by maintaining and operating the emissions unit and associated control equipment consistent with Subsection 4, below.

- b. Opacity of visible emission shall not equal or exceed forty (40) percent. [401 KAR 61:020 section 3(1)(a)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by the plans and procedures for monitoring under Subsection 4, below. The permittee shall demonstrate compliance with the standard by conducting a Method 9 if any visible emissions are observed during each unloading occurrence.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 3. Testing Requirements:

Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.

### 4. Specific Monitoring Requirements:

Item to be Monitored	Monitor	Record	Report
Visible Emissions	Per unloading occurrence	Maintain record of any visible emissions during unloading occurrence	semi-annually

- a. Maintain and operate the baghouse in accordance with good engineering practices, and plans and procedures developed by the operator.
- b. Make available upon request a copy of the operator's plans and procedures to the respective regional office.

### 5. Specific Recordkeeping Requirements:

See Table under Subsection 4.

### 6. Specific Reporting Requirements:

See Table under Subsection 4.

### 7. Specific Control Equipment Operating Conditions:

Replace broken bags in baghouse immediately.

### 8. Alternate Operating Scenarios:

None

19, 20, 38, and 69 - SILOS	
19 Starch Silo - Machine (Wet End)	
Description	The starch storage silo is used to store starch that is pneumatically unloaded from railcars or trucks prior to use at the paper machine (EP-64).
Control Equipment	Baghouse



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Rated Short-term Capacity	30 tons/hr
Installation Date	August 1989
<b>20 Clay Silo - Coater</b>	
Description	The coater clay unloading and silo is used to store clay that is pneumatically unloaded from railcars or trucks, prior to use in the coater machine complex (EP-52).
Control Equipment	Baghouse
Rated Short-term Capacity	30 tons/hr
Installation Date	August 1989
<b>38 Starch Silo - Coater</b>	
Description	The paper machine starch unloading and silo is used to store starch that is pneumatically unloaded from railcars or trucks prior to use in the paper machine complex (EP-52).
Control Equipment	Baghouse
Rated Short-term Capacity	15 tons/hr
Installation Date	August 1989
<b>69 PetCoke Storage Silo</b>	
Description	The petcoke storage silo is used to store petcoke that is pneumatically unloaded from trucks prior to use at lime kiln (EP-08).
Control Equipment	Baghouse
Rated Short-term Capacity	48 tons/hr
Installation Date	2006

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, is applicable since this facility commenced on or after April 9, 1972.

**REGULATIONS NOT APPLICABLE:**

401 KAR 61:020, *Existing process operations*, is not applicable since this facility did not commence before July 2, 1975.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations:**

None

**2. Emissions Limitations:**

- a. Pursuant to 401 KAR 59:010, Appendix A, the emissions of particulate matter shall not exceed the allowable rate limit as calculated by the following equations using the process weight rate (in units of tons/hr).

For process rates up to 1,000 lbs/hr:  $E = 2.34$

For process rates up to 60,000 lbs/hr:  $E = 3.59P^{0.62}$

For process rates in excess of 60,000 lbs/hr:  $E = 17.31P^{0.16}$

For the equations: E = rate of emission in lb/hr and P = process weight rate in tons/hr (Monthly throughput in tons/monthly hours of operation).

**Compliance Demonstration Method:** The permittee shall comply with this standard by maintaining and operating the emissions unit and associated control equipment consistent with Subsection 4, below.

- b. Opacity of visible emission shall not equal or exceed twenty (20) percent. [401 KAR 59:010 Section 3(1)(a)]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard by the plans and procedures for monitoring under Subsection 4, below. The permittee shall demonstrate compliance with the standard by conducting a Method 9 if any visible emissions are observed during each unloading occurrence.

**3. Testing Requirements:**

Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

Item to be Monitored	Monitor	Record	Report
Visible Emissions	Per unloading occurrence	Maintain record of any visible emissions during unloading occurrence	semi-annually

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. Maintain and operate the baghouse in accordance with good engineering practices and plans and procedures developed by the operator.
- b. Make available upon request a copy of the operator's plans and procedures to the respective regional office.

**5. Specific Recordkeeping Requirements:**

See Table under Subsection 4.

**6. Specific Reporting Requirements:**

See Table under Subsection 4.

**7. Specific Control Equipment Operating Conditions:**

Replace broken bags in baghouse immediately.

**8. Alternate Operating Scenarios:**

None

<b>40 and 41 - DRYERS</b>	
<b>40 Pulp Dryer - Line 1</b>	
Description	The two pulp drying lines are used to dry pulp for sale on the open market.
Control Equipment	Wet scrubbers (series)

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Rated Burner Capacity	43 mmBtu/hr
Rated Short-term Capacity	22 tons/hr
Installation Date	July 1970
<b>41 Pulp Dryer - Line 2</b>	
Description	The two pulp drying lines are used to dry pulp for sale on the open market.
Control Equipment	Wet scrubbers (series)
Rated Burner Capacity	43 mmBtu/hr
Rated Short-term Capacity	22 tons/hr
Installation Date	July 1970

**APPLICABLE REGULATIONS:**

401 KAR 61:020, *Existing process operations*, is applicable since this facility commenced before July 2, 1975.

**REGULATIONS NOT APPLICABLE:**

401 KAR 59:010, *New process operations*, is not applicable since this facility did not commence on or after April 9, 1972.

**1. Operating Limitations:**

The amount of air dried pulp produced shall not exceed 181,157 (air-dried tons) per rolling 12 months for both lines (EP-40 and EP-41) combined.

**Compliance Demonstration Method:** Compliance with the annual production limit shall be determined as a 12-month rolling total.

**2. Emissions Limitations:**

- a. Pursuant to 401 KAR 61:020, Appendix A, the emissions of particulate matter shall not exceed the allowable rate limit as calculated by the following equations using the process weight rate (in units of tons/hr).

For process rates up to 1,000 lbs/hr:  $E = 2.58$

For process rates up to 60,000 lbs/hr:  $E = 4.10P^{0.67}$

For process rates in excess of 60,000 lbs/hr:  $E = 55.0P^{0.11} - 40$

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

For the equations: E = rate of emission in lb/hr and P = process weight rate in tons/hr (Monthly throughput in tons/monthly hours of operation).

**Compliance Demonstration Method:** The permittee shall comply with this standard by maintaining and operating the emissions unit and associated control equipment consistent with Mill's plans, procedures, and practices.

- b. Pursuant to 401 KAR 61:020, Section 3(1)(a), the opacity of visible emissions shall not equal or exceed 40 percent from each of the wet scrubber stacks.

**Compliance Demonstration Method:** The permittee shall comply with this standard by maintaining and operating the emissions unit and associated control equipment consistent with Mill's plans, procedures, and practices as identified under Subsection 4, below. The permittee shall demonstrate compliance with the standard by conducting a Method 9 if any visible emissions are observed during the normal operation of the drying process.

**3. Testing Requirements:**

Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

Item to be Monitored	Monitor	Record	Report
Scrubber Liquid Flow Rate	once per shift	once per shift	semi-annually
Scrubber Liquid Pressure Differential	once per shift	once per shift	semi-annually

- a. Monitor the monthly air dried pulp production.
- b. Sum the air dried pulp production for any consecutive rolling 12 months for both lines. (EP-40 and EP-41)
- c. Monitor the hours per month for each production unit.

**5. Specific Recordkeeping Requirements:**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. See Table under Subsection 4.
- b. The Mill shall make available upon request the respective regional office a copy of plans, procedures, and practices.
- c. Maintain records generated under Subsections 4a, b, and c.

**6. Specific Reporting Requirements:**

- a. See Table under Subsection 4.
- b. Report records as specified for Subsection 5c.

**7. Specific Control Equipment Operating Conditions:**

Refer to the Table identified in Subsection 4, above

**8. Alternate Operating Scenarios:**

None

**51 Bleaching System**

**Description:**

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

The bleaching system includes all process equipment after the brown stock system used to chemically bleach the pulp. The washers, towers, and filtrate tanks are the major equipment. The gases are scrubbed to remove chlorine-containing compounds before being discharged.

The major equipment components in this group are listed below.

Chlorine dioxide generator  
Chlorine dioxide storage tank  
Bleach line towers (4)  
Bleach line filtrate tanks (4)  
Bleach line washers (4)  
Vent gas scrubber

Control Equipment: Beach plant scrubber  
Rated Short-term Capacity: 50 tons/hr  
Installation Date: July 1970  
Modification Commencement Date: December 1996 (replace the use chlorine with chlorine dioxide)

### **APPLICABLE REGULATIONS:**

401 KAR 63:021, *Existing sources emitting toxic air pollutants.*

401 KAR 63:002 (40 CFR 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the bleaching system from kraft pulping that use chlorinated compounds (i.e. hypochlorite or chlorine dioxide).

#### **1. Operating Limitations:**

- a. The equipment at each bleaching stage where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements of 40 CFR 63.445(c). [40 CFR 63.445(b)]

**Compliance Demonstration Method:** The permittee shall comply with this standard by maintaining design and operating records for the bleaching system showing the system complies with the requirements.

- b. The closed-vent system shall meet the requirements of 40 CFR 63.450. [40 CFR 63.445(b)]

**Compliance Demonstration Method:** The permittee shall comply with this standard by maintaining design and operating records for the bleaching system showing the system complies with the requirements.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. To reduce chloroform air emissions to the atmosphere, no hypochlorite or chlorine shall be used for bleaching in the bleaching system or line. [40 CFR 63.445(d)(2)]

**Compliance Demonstration Method:** The permittee shall comply with this standard by maintaining design and operating records for the bleaching system showing no hypochlorite or chlorine is used for bleaching.

### **2. Emissions Limitations:**

- a. The source-wide emissions of chlorine dioxide shall not exceed 8.85 lbs/hr. [Permit S-96-111 Condition G-26] [State-Origin Emissions Limitation]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance with this standard based upon emissions testing once over the permit term, and shall apply applicable test requirements, methods, and procedures as specified in 40 CFR 63 Subparts A and S. [40 CFR 63.7 & 40 CFR 63.457]

- b. The control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment specified in 40 CFR 63.445(b) shall be one of the following: [40 CFR 63.445(c)]
  - i. Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight; or
  - ii. Achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or
  - iii. Achieve a treatment device outlet mass emission rate of 0.001 kilograms of total chlorinated HAP mass per megagram (0.002 pounds per ton) of oven-dried pulp.

**Compliance Demonstration Method:** Compliance with the chlorinated HAP emission limit was demonstrated by the initial 40 CFR 63, Subpart S performance testing on September 26, 2001 which showed that the scrubber outlet concentration was less than 10 parts per million by volume of total chlorinated HAP. Stack testing required in Subsection 3, Testing Requirements, shall be used to demonstrate future compliance after the testing, along with Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

### **3. Testing Requirements:**

Testing of the scrubber outlet concentration for total chlorinated HAP shall be performed according to the test methods in 40 CFR 63.457, within 6 months of the final permit.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements:**

<b>Item to be Monitored</b>	<b>Monitor</b>	<b>Record</b>	<b>Report</b>
Scrubber pH	continuously	15-min	semi-annually
Scrubbant flow rate	continuously	15-min	semi-annually

The permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specification, a continuous monitoring system (CMS) as specified in 40 CFR 63.453(b) through (m), except as allowed in 40 CFR 63.453(m). The CMS shall include a continuous recorder.

**5. Specific Recordkeeping Requirements:**

- a. The applicable recordkeeping provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.454.
- b. See Table under Subsection 4.

**6. Specific Reporting Requirements:**

- a. The applicable reporting provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.455.
- b. See Table under Subsection 4.

**7. Specific Control Equipment Operating Conditions:**

None

**8. Alternate Operating Scenarios:**

None

**52 Coater Complex****Description:**

The coater applies water-based coating to a paper substrate to manufacture high performance

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

printing papers. The coating complex includes all coater-related process equipment. This process group was created to demonstrate compliance with several mill-wide emission limitations from these operations. The major equipments in this group are listed below.

Coating mixers (stack 18)

IR Dryer (stack 21)

IR Dryer (stack 22)

IR Dryer (stack 23)

IR Dryer (stack 24)

IR Dryer (stack 25)

IR Dryer (stack 26)

Ammonium hydroxide tank (stack 33)

Latex tank (stack 34)

PVA tank (stack 37)

TEC convection dryer (stack 27)

TEC convection dryer (stack 28)

TEC convection dryer (stack 29)

TEC convection dryer (stack 30)

TEC convection dryer (stack 31)

TEC convection dryer (stack 32)

Plastic pigment tank (stack 35)

Latex tank (stack 36)

Rated Short-term Capacity: 67 tons/hr of gross product, including the substrate.

Installation Date: August 1989

**APPLICABLE REGULATIONS:**

401 KAR 63:021, *Existing sources emitting toxic air pollutants.*

401 KAR 63:002 (40 CFR 63 Subpart JJJJ), *Paper and Other Web Coating*, is applicable to the facility that is a major source of Hazardous Air Pollutants (HAP) at which web coating lines are operated (effective December 5, 2005).

**REGULATIONS NOT APPLICABLE:**

401 KAR 59:210, *New fabric, vinyl and paper surface coating operations*. Any affected facility coating paper shall be exempt from Section 3 of this administrative regulation as specified in Section 6(1).

401 KAR 51:017 (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*. Source has taken limits to preclude a significant emissions increase of Volatile Organic Compound (VOC) and the applicability of BACT.

1. **Operating Limitations:** None

2. **Emissions Limitations:**

- a. To preclude 401 KAR 51:017, PSD, emissions of VOC from the Coating Process shall not exceed 39.9 tons/yr.

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

maintaining annual (12-month running total) material consumption, MSDS sheets, and by calculating emissions using a mass balance.

- b. The Coater Complex emission rate (hourly and 12-month running total, respectively) of ammonia shall not exceed 22.89 lb/hr and 99.99 tons/yr. [State-Origin Emissions Limitation from permit C-89-033]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by maintaining annual material consumption, and MSDS records and by calculating emissions based on a mass balance. Equation (1) shown below shall be used to demonstrate compliance for each pollutant.

- c. Coater Complex emission rate of 1,3 Butadiene shall not exceed 1.74 lb/hr and 7.6 tons/yr. [State-Origin Emissions Limitation from permit C-89-033]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by maintaining annual material consumption, and MSDS records and by calculating emissions based on a mass balance. Refer to Subsection 4, below. Equation (1) shown below shall be used to demonstrate compliance for each pollutant.

- d. Coater Complex emission rate of Vinyl Acetate shall not exceed 5.35 lb/hr and 23.38 tons/yr. [State-Origin Emissions Limitation from permit C-89-033]

**Compliance Demonstration Method:** The permittee shall demonstrate compliance by maintaining annual material consumption, and MSDS records and by calculating emissions based on a mass balance. Refer to Subsection 4, below. Equation (1) shown below shall be used to demonstrate compliance for each pollutant.

$$EMR_{(annual)} = \sum_n^I (\text{tons/yr}_{(mat\ n)} \times \text{conc}_{(mat\ n)}), EMR_{(hourly)} = EMR_{(annual)} / \text{hours}_{(annual)} \quad (1)$$

Where:  $EMR_{(annual)}$  = annual emission rate of pollutant  
 $EMR_{(hourly)}$  = hourly emission rate of pollutant  
 tons/yr = tons per year of each raw material with specific pollutant  
 conc = concentration of pollutant in each raw material  
 hours = annual coater hours of operation

- e. The permittee shall limit the organic HAP emissions to one of the following options specified in 40 CFR 63.3320(b):
  - i. No more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources;
  - ii. No more than 4 percent of the mass of coating materials applied for each month at

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- existing affected sources;
- iii. No more than 20 percent of the mass of coating solids applied for each month at existing affected sources;
  - iv. If using an oxidizer to control organic HAP emissions, operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) by compound on a dry basis is achieved and the efficiency of the capture system is 100 percent.

**Compliance Demonstration Method:** The permittee shall demonstrate compliance following the procedures specified in 40 CFR 63.3370. Refer to Subsection 3.b, Testing Requirements. Although other compliance demonstration options are specified in 40 CFR 63.3370, if the permittee chooses to comply with the emission limitation options specified in 40 CFR 63.3320(b)(2) or (3), the permittee can utilize the following option to demonstrate compliance. The monthly average organic HAP content of all as-applied coating materials must not be more than 0.04 kg of organic HAP per kg of coating material or no more than 0.2 kg organic HAP per kg of coating solids. The use of this compliance option does not prevent the permittee from using any of the other approved compliance options. [40 CFR 63.3370(c)(5)(ii)]

**3. Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.
- b. Performance testing pursuant to 40 CFR 63.3360 shall be completed within 180 days after December 5, 2005 if required by the menthol.

**4. Specific Monitoring Requirements:**

<b>Item to be Monitored</b>	<b>Monitor</b>	<b>Record</b>	<b>Report</b>
Coating Usage	monthly	monthly	semi-annually
Volatile Organic Content of all coating materials	monthly	monthly	semi-annually

**5. Specific Recordkeeping Requirements:**

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

If the permittee chooses to use the volatile organic content as a surrogate for the organic HAP content of coatings, the permittee shall use the methods specified in 40 CFR 63.3360(d)(1)-(3), which include the use of Method 24 or formulation data provided by the manufacturer of the material (MSDS). [40 CFR 63.3360(d)]  
See Table under Subsection 4.

### **6. Specific Reporting Requirements:**

Submit the reports required in 40 CFR 63.3400(b)-(g).  
See Table under Subsection 4.

### **7. Specific Control Equipment Operating Conditions:**

None

### **8. Alternate Operating Scenarios:**

None

### **9. Compliance Schedule:**

None

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Description:**

Unit is a 3,000 gallon gasoline tank.  
Rated Short-term Capacity: 3,000 gal  
Installation Date: Post-1972

### **APPLICABLE REGULATIONS:**

401 KAR 59:050, *New Storage Vessels for Petroleum Liquids*, is applicable to the facility with a storage capacity less than or equal to 151,400 liters (40,000 gallons) commenced on or after the April 9, 1972.

#### **1. Operating Limitations:**

The storage vessel shall be equipped with a permanent submerged fill pipe for petroleum liquids stored with a true vapor pressure of the petroleum liquid, as stored, is equal to or greater than ten and three-tenths (10.3) kPa (one and five-tenths (1.5) psia). [401 KAR 59:050 Section 3]

**Compliance Demonstration Method:** The permittee shall maintain construction diagrams verifying the existence of the submerged fill pipe, and the fill pipe shall be maintained in proper working order. [401 KAR 59:050 Section 3]

#### **2. Emissions Limitations:**

None

#### **3. Testing Requirements:**

Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.

#### **4. Specific Monitoring Requirements:**

The permittee shall review design status (size) of subject storage tank on an annual basis, and verify proper maintenance and operation of the submerged fill pipe.

#### **5. Specific Recordkeeping Requirements:**

None

#### **6. Specific Reporting Requirements:**

None

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**7. Specific Control Equipment Operating Conditions:**

None

**56 High Volume Low Concentration (HVLC) System**

**Description:**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

This unit is the vent gas collection and transport system used to convey HVLC gases to the bark boiler (primary control system, EP-09) or lime kiln (secondary control system, EP-08). The system is a combined system as defined in 40 CFR 63.441 because it conveys a specific named high concentration gas. Gases from the following major equipment components are regulated under 40 CFR 63 Subpart S and are listed below.

No. 1 Brownstock Washer Hood  
No. 2 Brownstock Washer Hood  
No. 1 Filtrate Tank  
No. 2 Filtrate Tank  
Blow Tank Condenser Vent  
Condensate Collection Tanks

Installation Date: 1997

**APPLICABLE REGULATIONS:**

401 KAR 63:002 (40 CFR 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the HVLC collection system.

**1. Operating Limitations:**

- a. The permittee shall comply with the requirements of 40 CFR 63.450(b), (c), and (d) for each enclosure or hood opening. [40 CFR 63.450(a)]
  - i. Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in 40 CFR 63.457(e). Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs. [40 CFR 63.450(b)]
  - ii. Each component of the closed-vent system used to comply with 40 CFR 63.443(c), 63.444(b), and 63.445(b) that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in 40 CFR 63.457(d). [40 CFR 63.450(c)]
  - iii. Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.443, 63.444, or 63.445 shall comply with either of the following requirements: [40 CFR 63.450(d)]



## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (1) On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that is capable of taking periodic readings as frequently as specified in 40 CFR 63.454(e). The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or
- (2) For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

**Compliance Demonstration Method:** Refer to Subsection 4, Specific Monitoring Requirements.

- b. The total HAP emissions in the HVLC System shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in 40 CFR 63.443(d). Each enclosure and closed-vent system used for capturing and transporting vent streams that contain HAP shall meet the applicable requirements specified in 40 CFR 63.450, Standards for Enclosures and Closed-Vent Systems. [40 CFR 63.443(c)]

**Compliance Demonstration Method:** Refer to 1.c, Operating Limitations.

- c. Affected systems vented into a closed-vent system shall be routed to the bark/combination boiler or lime kiln by introducing the HAP emission stream with the primary fuel or into the flame zone or to the bark boiler and introducing the HAP emission stream with the combustion air. [40 CFR 63.443(d)]

**Compliance Demonstration Method:** The system shall be designed, constructed, and operated to meet the requirements.

### **2. Emissions Limitations:**

None

### **3. Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.
- b. Refer to testing on the Bark Boiler (EP-09) and the Lime Kiln (EP-08).

### **4. Specific Monitoring Requirements:**

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. Applicable monitoring provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.453.
- b. Refer to Specific Monitoring Requirements on the Bark Boiler (EP-09) and the Lime Kiln (EP-08).

### **5. Specific Recordkeeping Requirements:**

- a. Applicable recordkeeping provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.454.
- b. Refer to Specific Recordkeeping Requirements on the Bark Boiler (EP-09) and the Lime Kiln (EP-08).

### **6. Specific Reporting Requirements:**

- a. Applicable reporting provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.455.
- b. Refer to Specific Reporting Requirements on the Bark Boiler (EP-09) and the Lime Kiln (EP-08).

### **7. Specific Control Equipment Operating Conditions:**

Refer to Subsection 1, Operating Limitation.

### **8. Alternate Operating Scenarios:**

None

## **57 Low Volume High Concentration (LVHC) System**

### **Description:**

This unit is the collection and transport system used to convey LVHC gases to the bark boiler (primary control system, EP-09) or lime kiln (secondary control system, EP-08) as defined in 40 CFR 63.441. Gases from the following major equipment components are regulated under 40

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

CFR 63 Subpart S and are listed below.

Evaporators  
Turpentine condenser  
Digester System

Rated Short-term Capacity: 1200 Air-Dried Tons of Unbleached Pulp per Day  
Modification Date: 1994

### **Applicable Regulations:**

401 KAR 63:002 (40 CFR 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the LVHC collection system.

### **1. Operating Limitations:**

- a. The permittee shall comply with the requirements of 40 CFR 63.450(b), (c), and (d) for each enclosure or hood opening. [40 CFR 63.450(a)]

**Compliance Demonstration Method:** Refer to Subsection 4, Specific Monitoring Requirements.

- b. Total HAP emission from the LVHC system shall be controlled as specified in 40 CFR 63.443(c) or (d). [40 CFR 63.443(a)(1)(i)]

**Compliance Demonstration Method:** Refer to 1.d, Operating Limitations.

- c. The total HAP emissions in the LVHC System shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in 40 CFR 63.443(d). Each enclosure and closed-vent system used for capturing and transporting vent streams that contain HAP shall meet the applicable requirements specified in 40 CFR 63.450, Standards for Enclosures and Closed-Vent Systems. [40 CFR 63.443(c)]

**Compliance Demonstration Method:** Refer to 1.d, Operating Limitations.

- d. Affected systems vented into a closed-vent system shall be routed to the bark/combination boiler or lime kiln by introducing the HAP emission stream with the primary fuel or into the flame zone or to the bark boiler and introducing the HAP emission stream with the combustion air. [40 CFR 63.443(d)]

**Compliance Demonstration Method:** The system shall be designed, constructed, and operated to meet the requirements.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **2. Emissions Limitations:**

Refer to the Digester System (EP-05).

### **3. Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the Division.
- b. Refer to testing on the Bark Boiler (EP-09) and the Lime Kiln (EP-08).

### **4. Specific Monitoring Requirements:**

- a. Applicable monitoring provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.453.
- b. Refer to Specific Monitoring Requirements on the Bark Boiler (EP-09) and the Lime Kiln (EP-08).

### **5. Specific Recordkeeping Requirements:**

- a. Applicable recordkeeping provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.454.
- b. Refer to Specific Recordkeeping Requirements on the Bark Boiler (EP-09) and the LimeKiln (EP-08).

### **6. Specific Reporting Requirements:**

- a. Applicable reporting provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.455.
- b. Refer to Specific Reporting Requirements on the Bark Boiler (EP-09) and the Lime Kiln (EP-08).

### **7. Specific Control Equipment Operating Conditions:**

Refer to Subsection 1, Operating Limitation.

### **8. Alternate Operating Scenarios:**

None

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**63 Pulping Process Condensate Collection and Treatment System**

**Description:**

This unit is the system conveying pulping process condensates regulated under 40 CFR 63.446 to the wastewater treatment plant. The wastewater treatment plant is the primary condensate treatment system. The major equipment components in this group are listed below.

Evaporator condensates  
Pulp Mill condensates

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Installation Date: November 2000

**APPLICABLE REGULATIONS:**

401 KAR 63:002 (40 CFR 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the kraft processes subject to the requirements of evaporator condensates.

**1. Operating Limitations:**

- a. One of the following combinations of HAP-containing pulping process condensates generated, produced, or associated with the equipment systems listed in 40 CFR 63.446(b) shall be subject to the requirements of 40 CFR 63.446(d) and (e). [40 CFR 63.446(c)]
  - i. All pulping process condensates from the equipment systems specified in 40 CFR 63.446(b)(1) through (b)(5).
  - ii. The combined pulping process condensates from the equipment systems specified in 40 CFR 63.446(b)(4) and (b)(5), plus pulping process condensate stream(s) that in total contain at least 65% of the total HAP mass from the pulping process condensates from equipment listed in 40 CFR 63.446(b)(1) through (b)(3).
  - iii. The pulping process condensates from equipment systems listed in 40 CFR 63.446(b)(1) through (b)(5) that in total contain a total HAP mass of 11.1 pounds or more of total HAP per ton of oven-dried pulp, based upon a 15-day rolling average.

**Compliance Demonstration Method:** The condensate collection system shall be designed, constructed, and operated to meet the above requirements.

- b. The pulping process condensates from the equipment systems listed in 40 CFR 63.446(b) shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified in 40 CFR 63.446(d)(1) and (d)(2). [40 CFR 63.446(d)]

**Compliance Demonstration Method:** The condensate collection system shall be designed, constructed, and operated to meet the above requirements.

- c. Each pulping process condensate from the equipment systems listed in 40 CFR 63.446(b) shall be treated according to one of the options outlined in 40 CFR 63.446(e)(1-5). [40 CFR 63.446(e)]

**Compliance Demonstration Method:** The collected condensates shall be treated as required under 40 CFR 63.446(e).

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

2. **Emissions Limitations:** None

3. **Testing Requirements:** None

4. **Specific Monitoring Requirements:**

- a. Pursuant to 40 CFR 63.453, the permittee shall implement and maintain an acceptable Leak Detection and Repair Program (LDAR) for condensate collection system.
- b. Pursuant to 40 CFR 63.446, contaminated condensates shall be collected and treated.

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 40 CFR 63.443 and 63.454, the permittee shall maintain records of all required inspections under the LDAR program.
- b. Pursuant to 40 CFR 63.446, the permittee shall maintain records of periods when the condensate collection and treatment requirements are not being met must be kept.
- c. Applicable recordkeeping provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.454.

6. **Specific Reporting Requirements:**

Applicable reporting provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.455.

7. **Specific Control Equipment Operating Conditions:**

Refer to Subsection 1, Operating Limitations.

## **64 Paper Machine System**

### **Description:**

The paper machine system includes all paper machine process equipment.

Rated Short-term Capacity: 67 tons/hr

Installation Date: July 1970

### **Applicable Regulations:**

401 KAR 51:017 (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*,

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

effective January 6, 1975, is applicable to significant increases from modified emissions units.

**1. Operating Limitations:**

The permittee shall use only clean process water. Clean process water is defined to be any water except foul pulping condensates. [401 KAR 51:017]

**Compliance Demonstration Method:** The paper machine system shall be designed and operated to meet the above requirements. Any project changes that may affect this condition shall be submitted to the Division for review and analysis prior to execution of the planned modification.

- 2. Emissions Limitations:** None
- 3. Testing Requirements:** None
- 4. Specific Monitoring Requirements:** None
- 5. Specific Recordkeeping Requirements:** None
- 6. Specific Reporting Requirements:** None
- 7. Specific Control Equipment Operating Conditions:** None
- 8. Alternate Operating Scenarios:** None

**66 Wastewater Treatment System****Description:**

The wastewater treatment system processes all the mill effluent prior to final discharge. The system includes a primary phase to remove the majority of the settleable solids and the secondary system that removes most of the organic materials and additional solids.

Rated Short-term Capacity: 40 million gallons per day  
Installation Date: 1976

**Applicable Regulations:**



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

401 KAR 63:002 (40 CFR 63 Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, is applicable to the kraft processes subject to the requirements of wastewater treatment system.

**1. Operating Limitations:**

Each pulping process condensate from the equipment systems listed in 40 CFR 63.446(b) shall be treated according to one of the options outlined in 40 CFR 63.446(e)(1-5). [40 CFR 63.446(e)]

**Compliance Demonstration Method:** The condensates collected are treated as required in 40 CFR 63.446(e) by introduction into the secondary waste treatment system.

**2. Emissions Limitations:**

None

**3. Testing Requirements:**

Quarterly testing shall be conducted as required in 40 CFR 63.457 to demonstrate overall system performance.

**4. Specific Monitoring Requirements:**

Item to be Monitored	Monitor	Record	Report
Total aeration Hp	daily	daily	semi-annually

Applicable monitoring provisions are specified in 40 CFR 63.453.

**5. Specific Recordkeeping Requirements:**

- Pursuant to 40 CFR 63.446, the permittee shall maintain records of periods when the condensate collection and treatment requirements are not being met must be kept.
- See Table under Subsection 4.

**6. Specific Reporting Requirements:**

- Applicable reporting provisions are specified in 40 CFR 63 Subparts A and 40 CFR 63.455.
- See Table under Subsection 4.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**7. Specific Control Equipment Operating Conditions:**

The secondary waste treatment system is used as a control device for the pulping process condensates. The requirements associated with that control are outlined in EP-63, *Pulping Process Condensate Collection and Treatment System*.

**8. Alternate Operating Scenarios:**

None

**67 Methanol Storage Tanks**

**Description:**

Methanol storage tank for feed stock to the chlorine dioxide generation process.

Control Equipment: Nitrogen Pad

Capacity: 15,000 gal

Installation Date: 1996

**APPLICABLE REGULATIONS:**

None

**REGULATIONS NOT APPLICABLE:**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

401 KAR 60:005 (40 CFR 60 Subpart Kb), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*, is not applicable since this storage tank has a capacity less than 75 cubic meters (19,812.9 gallon) that is used to store volatile organic liquids.

1. **Operating Limitations:** None
2. **Emissions Limitations:** None
3. **Testing Requirements:** None
4. **Specific Monitoring Requirements:** None
5. **Specific Recordkeeping Requirements:** None
6. **Specific Reporting Requirements:** None
7. **Specific Control Equipment Operating Conditions:**

The goal of a nitrogen pad is to prevent volatilization of the methanol for safety reasons. The control efficiency is a 99% approximately.

8. **Alternate Operating Scenarios:** None

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<b><u>Description</u></b>	<b><u>Generally Applicable Regulation</u></b>
1. <i>BL11-BL13, Bleached Hardwood and Softwood High Density Storage Tanks</i>	<i>None</i>
2. <i>BL14, Anthraquinone Tank</i>	<i>None</i>
3. <i>B5, #2 Fuel Oil Tank</i>	<i>None</i>
4. <i>B6, Bark Boiler Fines Drop Point</i>	<i>61:020</i>
5. <i>B7, Cl<sub>2</sub> Cylinder Storage Area</i>	<i>None</i>
6. <i>WY25, Diesel Storage Tank</i>	<i>None</i>
7. <i>WY29, Bark/Sawdust Piles</i>	<i>63:010</i>
8. <i>M1, Miscellaneous Parts Cleaners</i>	<i>None</i>
9. <i>M3, Mill-wide Space Heaters</i>	<i>None</i>
10. <i>M4, Sand Blast Area</i> <i>M5, Wood Working Area</i> <i>M6, Painting Area</i>	<i>63:010</i>
11. <i>M7, Small Oil Storage Tank in the Paper Machine Area</i>	<i>None</i>
12. <i>PM31-PM35, Coating Batch Storage Tanks</i>	<i>None</i>
13. <i>PM37, Pulp Slurry Fixed Roof Storage Tank</i>	<i>None</i>
14. <i>PM39, Couch Pit Pulper</i> <i>PM40, Press Pit Pulper</i> <i>PM41, Size Press Pulper</i> <i>PM42, Calendar Pulper</i>	<i>None</i>
15. <i>PM43-PM45, Broke Storage Tanks 1-3</i>	<i>None</i>
16. <i>PM46, Paper Machine Repulper</i> <i>PM47, Coater Repulper</i> <i>PM48, Coater Trim Repulper</i> <i>PM49, Coater #2 Rereeler Repulper</i>	<i>None</i>
17. <i>PM50, PVOH Storage Tank</i> <i>PM51, PVOH Cook Tank</i>	<i>None</i>
18. <i>PM52, Titanium Make-Up Tank</i> <i>PM53, Titanium Dioxide Run Tank</i>	<i>None</i>

**SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)**

<b><u>Description</u></b>	<b><u>Generally Applicable Regulation</u></b>
19. <i>PM54-PM57, Dye Tanks 1-4</i>	<i>None</i>
20. <i>PM58, Texstrip Tank</i>	<i>None</i>
21. <i>PM59, Corrosion Inhibitor Tank</i>	<i>None</i>
22. <i>PM24, F-1 Cotton Cloth Grinding</i>	<i>59:010</i>
23. <i>PM25, Rubber Roll Grinding</i>	<i>59:010</i>
24. <i>PM26-PM27, F-3 and F-4 Core Sawing</i>	<i>59:010</i>
25. <i>PM28, F-5 Core Sawing and Mill Capping</i>	<i>59:010</i>
26. <i>Sawing and Grinding related to coating operations</i>	<i>59:010</i>
27. <i>Recycled Fiber Storage Tank</i>	<i>None</i>
28. <i>PM60, Titanium Dioxide Tank</i>	<i>None</i>
29. <i>PM61, Trial Additive Tank #1</i> <i>PM63, Trial Additive Tank #2</i>	<i>None</i>
30. <i>PM62, Dispersant Tank</i>	<i>None</i>
31. <i>PM64, Coating Storage Tank #2</i> <i>PM65, Coating Reclaim Tank</i>	<i>None</i>
32. <i>PM66, CMC Storage Tank</i> <i>PM67, CMC Makedown</i>	<i>None</i>
33. <i>PM68, Violet Dye Makedown Storage Tank</i> <i>PM69, Spare Makedown Storage Tank</i> <i>PM68, Blue Dye Makedown Storage Tank</i>	<i>None</i>
34. <i>PM71, Polymer Tank</i>	<i>None</i>
35. <i>PM72, Corrosion Inhibitor Tank</i>	<i>None</i>
36. <i>PM73, Glycol System Tank</i>	<i>None</i>
37. <i>P12, Pulp Mill Sewer</i> <i>P13, Bleach Plant Sewer</i>	<i>None</i>
38. <i>P20, Chlorine Dioxide Tank #1</i> <i>P21, Chlorine Dioxide Tank #2</i>	<i>None</i>
39. <i>P22, Hydrogen Peroxide Tank</i>	<i>None</i>
40. <i>R18, Slaker Grit Pit</i>	<i>None</i>
41. <i>R19, Dregs Mix Tank</i>	<i>None</i>
42. <i>R20, Emergency Diesel Generator</i>	<i>None</i>

**SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)**

<b><u>Description</u></b>	<b><u>Generally Applicable Regulation</u></b>
43. <i>R27, Muriatic Acid Tank (10% HCl)</i>	<i>None</i>
44. <i>WW1, Diesel Oil Tank</i>	<i>None</i>
45. <i>WW3, Gravity Thickener</i>	<i>None</i>
46. <i>WW4, Sewer Mix Chamber</i>	
47. <i>WW5, Sludge Press</i>	<i>None</i>
48. <i>WW6, Mud/Ash Lagoon</i> <i>WW8, #2 Sludge Lagoon</i> <i>WW12, Emergency Clarifier</i>	<i>None</i>
49. <i>WW15, Splitter Box</i>	<i>None</i>
50. <i>WW17, Defoamer Tank #1</i> <i>WW18, Defoamer Tank #2</i>	<i>None</i>
51. <i>SR23, Dreg Washer</i>	<i>None</i>
52. <i>SR28, Lime Mud Tank #1</i> <i>SR29, Lime Mud Tank #2</i>	<i>None</i>
53. <i>SR31, Lime Mud Washer</i> <i>SR38, Mud Dilution Mixer</i> <i>SR39, Lime Mud Filter</i>	<i>None</i>
54. <i>Plant Paved and Unpaved Roadways</i>	<i>63:010</i>
55. <i>SP17, Flash Pulp Baler #1</i> <i>SP18, Flash Pulp Baler #2</i>	<i>61:020</i>

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in the permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. TSM, HCl, total chlorinated HAP, Hg, SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

## **SECTION E – SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used shall be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.



## **SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V )1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements shall be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING  
REQUIREMENTS (CONTINUED)**

**Division for Air Quality  
Paducah Regional Office  
130 Eagle Nest Drive  
Paducah, KY 42003**

**U.S. EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960**

**Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601**

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**SECTION G – GENERAL CONDITIONS****(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

## SECTION G – GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

## SECTION G – GENERAL CONDITIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in the permit and
  - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

### (b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

### (c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**SECTION G – GENERAL CONDITIONS (CONTINUED)****(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points X, Y, Z in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (test) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.

**SECTION G – GENERAL CONDITIONS (CONTINUED)**

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR



## SECTION G – GENERAL CONDITIONS (CONTINUED)

52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

None

## **SECTION I - COMPLIANCE SCHEDULE**

This Section is not applicable.

**SECTION J – ACID RAIN**

This Section is not applicable.

**SECTION K – NO<sub>x</sub> BUDGET PERMIT****1. Statement of Basis**

In accordance with KRS 224.10-100, the Kentucky Natural Resources and Environmental Protection Cabinet issues this permit pursuant to 401 KAR 52:020, Title V permits, 401 KAR 51:160, *NO<sub>x</sub> requirements for large utility and industrial boilers*, and 40 CFR Part 97 Subpart C.

**2. NO<sub>x</sub> Budget Permit Application, Form DEP 7007EE**

The NO<sub>x</sub> Budget Permit application for these boilers was submitted to the Division and received on October 24, 2002. Requirements contained in that application are hereby incorporated into and made part of this NO<sub>x</sub> Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source operate in compliance with those requirements.

**3. Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions**

Power Boilers 1 and 2 each have capacities greater than 250 mmBtu/hr and are subject to the NO<sub>x</sub> budget permitting process. These two boilers use natural gas as the fuel source, and are used to provide part of the steam load at the Mill.

NO<sub>x</sub> budget limits are based on regulations listed in the Title V operating permit and Statement of Basis. Specifics may be found under operating and emission limits, and monitoring and recordkeeping of the Title V operating permit.

The Title V operating permit requires that by no later than November 30 of each year, the owner or operator shall hold NO<sub>x</sub> allowances available for compliance deductions in the unit's compliance account in an amount not less than the total NO<sub>x</sub> emissions for the control period from the unit. To demonstrate compliance, the Mill will submit to the Division and the USEPA Regions IV administrator, a compliance certification report for all affected units. Each year that the NO<sub>x</sub> budget source, the Mill, elects to monitor NO<sub>x</sub> emissions from the boiler using a Low Mass Emission Unit (LMEU) methodology, the Mill is required to submit a demonstration showing that the boiler(s) continues to emit no more than 50 tons of NO<sub>x</sub> per ozone season. The emission limits listed under the Title V operating permit specifies that the NO<sub>x</sub> budget limit per boiler shall not exceed 50 TPY for a given ozone season. Refer to the Title V operating permit for the specific terms of the budget limits. The permittee is required to monitor, calculate and demonstrate that NO<sub>x</sub> emissions for this demonstration shall be calculated as required in Section B.2 and B.4 of the Title V operating permit. Should any LMEU fail to provide the required demonstration, such that the calculated cumulative emissions for the unit exceed 50 tons of NO<sub>x</sub> at the end of any ozone season, then:

- i. The LMEU shall be disqualified from using the low mass emissions excepted methodology; and

## **SECTION K – NO<sub>x</sub> BUDGET PERMIT (CONTINUED)**

- ii. The owner or operator of the LMEU shall install and certify monitoring systems that meet the requirements of 40 CFR Part 75.10 by December 31 of the calendar year following the ozone season in which the unit exceeded 50 tons NO<sub>x</sub>.

### **4. Summary of Actions**

The NO<sub>x</sub> Budget Permit is being issued as part of this revised Title V permit for this source. Public, affected state, and U.S. EPA review will follow procedures specified in 401 KAR 52:100.